

ENT



Appellant submits this Appeal Brief to the Board of Patent Appeals and Interferences on appeal from the decision of the Examiner of Group Art Unit 2616 dated January 11, 2006, finally rejecting claims 11-26.

## Table of Contents

<u>Appeal Brief Section</u>	<u>Page Number</u>
Real Party in interest	3
Related Appeals and Interferences	4
Status of Claims	5
Status of Amendments	6
Summary of Claimed Subject Matter	8
Grounds of Rejections to be Reviewed on Appeal	16
Argument	17
Conclusion	41
Claims Appendix	42
Evidence Appendix	45
Related Proceedings Appendix	46

**Real Party in Interest**

The real party in interest is Thomson Licensing

### **Related Appeals and Interferences**

Appellant asserts that no other appeals or interferences are known to the Appellant, the Appellant's legal representative, or assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

### **Status of Claims**

Claims 1-10 were originally presented with the filed application. Subsequently claims 1-10 were cancelled and replaced with claims 11-26 presented in a preliminary amendment submitted on April 4, 2003. Claims 11-23, 25 and 26 stand finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Logan (US Patent No. 5,371,551) in view of Hrusecky (US Patent No. 6,317,164). In addition, the Examiner finally rejected claims 11, 17, 21 and 24 under 35 U.S.C. § 103(a) as being unpatentable over Rigatti (US Patent No. 6,614,984) in view of Hrusecky (US Patent No. 6,317,164).

### **Status of Amendments**

A preliminary amendment was filed on April 03, 2003 cancelling the Appellant's claims 1-10 and submitting new claims 11-26.

A first response was filed on March 03, 2005 to overcome a First Office Action dated December 17, 2004. In the First Office Action, the Examiner rejected the Appellant's claims 11- 23, 25 and 26 under 35 U.S.C. § 102(b) as being rendered obvious by Logan (US Patent 5,371,551, hereinafter "Logan"). The Examiner further rejected the Appellant's claims 21 and 24 under 35 U.S.C. § 102(b) as being rendered obvious by Ochi et al. (EP 0920201A1, hereinafter "Ochi"). In the response filed on March 03, 2005, the Appellant amended claims 11, 13 and 20-23. The Appellant further set forth arguments traversing the rejections issued by the Examiner and distinguishing the Appellant's invention over the cited prior art.

A second response was filed on October 21, 2005 to overcome a Second Office Action dated August 24, 2005. In the Second Office Action, the Examiner again rejected the Appellant's claims 11- 23, 25 and 26 under 35 U.S.C. § 102(b) as being rendered obvious by Logan. In the Second Office Action, the Examiner further rejected the Appellant's claims 11, 17, 21 and 24 under 35 U.S.C. § 102(e) as being rendered obvious by Rigatti (US Patent 6,614,984, hereinafter "Rigatti"). In the response filed on October 21, 2005, the Appellant amended claims 11, 17 and 21. The Appellant further set forth arguments traversing the rejections issued by the Examiner and distinguishing the Appellant's invention over the cited prior art.

A third response was filed on March 16, 2006 to overcome a Final Office Action dated January 11, 2006. In the Final Office Action, the Examiner rejected the Appellant's claims 11- 23, 25 and 26 under 35 U.S.C. § 103(a) as being unpatentable over Logan in view of Hrusecky (US Patent 6,317,164, hereinafter "Hrusecky"). The Examiner further rejected the Appellant's claims 11, 17, 21 and 24 under 35 U.S.C. § 103(a) as being unpatentable over Rigatti in view of Hrusecky. In the response filed on March 16, 2006, the Appellant set forth arguments traversing the rejections issued by the Examiner and distinguishing the Appellant's invention over the cited prior art.

The Examiner responded to the Appellant's response of March 16, 2006 with an Advisory Action dated April 13, 2006. In the Advisory Action, the Examiner reiterated

the rejections of the Final Office Action and set forth rebuttals to the Appellant's reasoning for distinguishing the Appellant's invention over the cited prior art. In response to Advisory Action, the Appellant submitted a Notice of Appeal dated June 06, 2006.

The claims on appeal are those of the Appellant's responses filed on October 21, 2005 and March 16, 2006 (they have the same claims). That is, the claims on appeal are the Appellant's claims 11-26, which are listed in the attached Appendix.

### **Summary of Claimed Subject Matter**

The invention of the Appellant provides a digital video recorder including an analog source and at least a digital source, where the analog source is encoded by an included encoder. In the digital video recorder of the Appellant's invention, an included multiplexer is connected to both the encoder and the digital source, to a medium interface for recording and reading on a medium, and to a digital decoder linked to a display. The arrangement of the Appellant's invention enables the video recorder to record and monitor, independently, any of the sources. The Appellant also discloses a multiplexer for a digital video recorder with at least two inputs for receiving each a digital stream, with a point for connection to a medium interface and with at least one output, wherein a first switch selectively connects said point to one of the inputs and wherein a second switch selectively connects the output to one of the inputs or to said point.

As suggested in MPEP 1206, the Appellant now reads at least two of the broadest appealed claims on the specification and on the drawings. It should be understood, however, that the appealed claims may read on other portions of the specification or other figures that are not listed below.

With regards to a first embodiment, the Appellant's Specification specifically teaches that a digital video recorder in accordance with one embodiment of the Appellant's invention, at least with respect to figure 2, comprises an analog source 12 and a digital source 14. The analog source 12 is depicted as an analog tuner receiving analog video signals from a remote emitter through an antenna. The Appellant further discloses that an analog source 12 could also be for instance the output of a conventional analog VCR.

The digital source 14 is described by the Appellant as a digital tuner receiving from an antenna or a cable-link a video signal which is digitally coded for transmission, for instance according to the MPEG-II format. This kind of digitally coded signals (or digital streams) is already widely used for video signals received from satellites and should become used in the coming years even for terrestrial communications (new HDTV standards). The Appellant further disclose that another example of a digital source 14 is a hard-disk drive (HDD).



In the digital video recorder of the Appellant, a digital encoder 16 receives the analog signal from the analog source 12 and outputs a digital stream, for instance coded according to the MPEG-II format. The main steps which are achieved by the digital encoder 16 are converting the analog signal into a digital signal (notably through sampling of the analog signal), processing the digital signal (notably separating of luminance and chrominance, which are generally mixed together in the analog signal, to obtain a so-called YUV signal) and coding (and possibly compressing) the digital signal according to a given format.

Furthermore, the digital streams from the digital source 14 and from the digital encoder 16 are coded according to the same format, which may be for instance the widely-used MPEG-II format. The digital encoder 16 on the one hand and the digital source 14 on the other hand are connected to two distinct inputs of a multiplexer 18.

The multiplexer 18 is also connected via a bi-directional link to a medium interface 20. The medium interface 20 is able to convert the coded digital stream into a bit stream to record it on a medium. For instance, in a digital VCR, the medium interface 20 comprises a drum carrying magnetic heads in order to record the bit stream on a magnetic tape according to the D-VHS format. In the reverse way, the medium interface 20 can read a bit stream from the pre-recorded medium and convert it into a digital stream coded according to a specific format, like MPEG-II, and output the digital stream on the bi-directional link.

The Appellant further teaches that an output of the multiplexer 18 is connected to a digital decoder 22. The digital decoder 22 is able to convert a coded digital stream (for instance a MPEG-II stream) into an analog signal to be displayed on a display 25. The main steps of this conversion are decoding the coded digital stream (e.g. MPEG-II) into a non-coded (and hence non-compressed) digital signal (e.g. a YUV signal) and then generating an analog signal (digital-to-analog conversion). The analog signal output from the digital decoder 22 can be for instance of the CVBS-type, of the S-Video type or of the RGB-type and is sent to a display 10, for instance a television set.

The multiplexer 18 enables the recording and displaying independently of any of the video signals from the analog source 12 and the digital source 14. Of course, it also allows the display of a pre-recorded video signal.

The Appellant points to figure 3 for illustrating that the multiplexer 18 has two separate inputs 22, 24 for receiving a coded digital video stream. The input 22 is connected to the output of the digital encoder 16 and the input 24 is connected to the output of the digital source 14. The multiplexer 18 has an output 28 connected to the digital decoder 22. The multiplexer 18 is also connected at point 26 to the medium interface 20 via the bi-directional link.

The multiplexer 18 illustratively comprises a first switch 30 and a second switch 32. The first switch 30 allows to selectively link point 26 to input 22 or to input 24. The first switch 30 consequently allows the selection of which video signal (among video signal from the analog source 12 and video signal from the digital source 14) should be sent to the medium interface 20 for recording.

The second switch 32 of the multiplexer enables the selective connection of output 28 to input 22, to input 24 or to point 26. As such, the second switch 32 thus enables the selection of which video signal is to be decoded in decoder 22 and displayed on display 25 among video signal from the analog source 12 (input 22) and video signal from the digital source 14 (input 24), independently of the possible recording of one of these signals. The second switch 32 also enables the display of a pre-recorded signal read from the medium interface 20 during play-back (point 26).

The Appellant in the Specification presents an example of how the described structure of a digital video recorder can be implemented. More specifically, the Appellant teaches that if a user wants to record the video signal from the analog source 12, the first switch 30 will connect the input 22 to point 26. The analog signal from the analog source 12 will be digitally coded (and compressed) by the digital encoder 16 and then transmitted to the medium interface 20 for recording on the medium via input 22, switch 30 and point 26. The user will then be able to choose to watch the video signal from analog source 12 which is recorded at the same time or to watch the video signal from digital source 14 (while the video signal from the analog source 12 is digitally recorded as explained above). If the user chooses to watch the video signal from digital source 14, the second switch 32 will connect output 28 to input 24. The video signal from digital source 14 will thus be sent to the display 25 through the digital decoder 22.

Furthermore, and with regards to at least a second embodiment of the Appellant's invention, the Appellant points to figure 4. More specifically, the embodiment of figure 4 uses another source 34, here a digital video source, which is for instance a digital camcorder according to the DV standard. The video recorder comprises a transcoder 36 which allows the conversion of the digital signal from the digital video source 34 (DV standard) into a digital stream using the same standard as the digital source 14 and the encoder 16, typically MPEG-II.

In the embodiment of figure 4, the multiplexer 18 has an input 42 connected to the transcoder 36. The multiplexer 18 comprises a first switch 38, similar to the switch 30 of figure 3 with one more input connected to the transcoder 36 via input 42, and a second switch 40, similar to switch 32 of figure 3 with one more input connected to the transcoder 36 via input 42.

The video recorder of figure 4 operates similarly to the video recorder of figure 3, with the possibility to select among 3 sources instead of 2, and still to record one source and to watch another one on the display 25.

The Appellant further depicts another embodiment represented in figure 5. In the video recorder of figure 5 as compared to the solution of figure 4, point 26 and output 28 are connected to two respective inputs of a record switch 50. The record switch 50 has an output connected to the transcoder 36, for instance via a bi-directional link also used for connection with point 42.

The record switch 50 allows to select which video signal is to be recorded on the digital video source 34 (when recording is possible, as with a camcorder), either video signal from the medium interface 20 (video signal reproduced from a tape) or video signal sent for display (analog source or digital source). Thanks to the provision of the record switch 50, the preceding advantages are maintained, even when recording on the digital video source 34.

For the convenience of the Board of Patent Appeals and Interferences, Appellant's pending claims are presented below in claim format with elements read on the drawings and appropriate citations to at least one portion of the specification for each element of the appealed claims (with reference numerals added).

Claim 11 positively recites (with reference numerals added, where applicable):

11. A digital video recorder comprising:  
an encoder (16) of a first analog signal into a first digital stream;  
a decoder (22) of a second digital stream into a second analog signal;  
a medium interface (20) for reading and recording on a medium;  
at least one digital source (14) outputting a third digital stream; and,  
a multiplexer (18) coupled to the encoder (16) and to the decoder (22) and to the digital source (14) and to the medium interface (20),  
wherein the multiplexer (18) comprises a first switch (30), which selectively couples the decoder (22) directly to the encoder (16) or to the digital source (14) such that the first digital stream from the encoder (16) is able to be communicated to the decoder (22) without prior recording.  
(See Appellant's specification, page 3, line 27 through page 5, line 12).

Claim 12 positively recites:

12. A digital video recorder according to claim 11, wherein the multiplexer (18) comprises a second switch (32) which selectively couples the medium interface (20) to the encoder (16) or to the digital source (14).  
(See Appellant's specification, page 5, lines 13-19).

Claim 13 positively recites:

13. A digital video recorder according to claim 11, wherein the first switch (30) selectively couples the decoder (22) to the encoder (16), to the digital source (14) or to the medium interface (20). (See Appellant's specification, page 5, lines 8-12).

Claim 14 positively recites:

14. A digital video recorder according to claim 11, wherein a transcoder (36) receiving a fourth digital stream is coupled to the multiplexer (18).  
(See Appellant's specification, page 6, lines 3-7).

Claim 15 positively recites:

15. A digital video recorder according to claim 14, wherein the second switch (32) selectively couples the medium interface (20) to the encoder (16), to the digital source (14) or to the transcoder (36), and wherein the first switch (30) selectively couples the decoder (22) to the encoder (16),

to the digital source (14) or to the transcoder (36). (See Appellant's specification, page 6, lines 7-11).

Claim 16 positively recites:

16. A digital video recorder according to claim 14, wherein the first switch (30) selectively couples the decoder (22) to the encoder (16), to the digital source (14), to the transcoder (36) or to the medium interface (20). (See Appellant's specification, page 5, lines 10-12).

Claim 17 positively recites:

17. A digital video recorder comprising:  
a digital encoder (16);  
a digital decoder (22);  
a medium interface (20) for reading and recording on a medium;  
a multiplexer (18), coupled to the digital encoder (16), to the digital decoder (22) and to the medium interface (20), the multiplexer (18) having a first switch (30) which couples the digital decoder (22) directly to the digital encoder (16) such that a signal from the encoder (16) is able to be communicated to the decoder (22) without prior recording. (See Appellant's specification, page 3, line 27 through page 5, line 12).

Claim 18 positively recites:

18. A digital video recorder according to claim 17, wherein the multiplexer (18) comprises a second switch (32), which couples the medium interface (20) to the digital encoder (16). (See Appellant's specification, page 5, lines 13-19).

Claim 19 positively recites:

19. A digital video recorder according to claim 17, wherein the first switch (30) selectively couples the decoder (22) to the encoder (16) or to the medium interface (20). (See Appellant's specification, page 5, lines 8-12).

Claim 20 positively recites:

20. A digital video recorder according to claim 17, wherein the digital encoder (22) is coupled to a tuner (12) for receiving analog signals. (See Appellant's specification, page 4, lines 3-5).

Claim 21 positively recites:

21. A digital video recorder comprising:  
an encoder (16) of a first analog signal into a first digital stream;  
a medium interface (20) for reading a second digital stream from a medium;  
a decoder (22) for decoding the first digital stream or the second digital stream into a second analog stream;  
means (18) for communicating the first digital stream directly from the encoder (16) to the decoder (22) without prior recording. (See Appellant's specification, page 3, line 27 through page 5, line 12, and page 6, lines 1-29).

Claim 22 positively recites:

22. Digital video recorder according to claim 21, wherein a tuner (12) generates the first analog signal. (See Appellant's specification, page 3, lines 28-30).

Claim 23 positively recites:

23. A digital video recorder according to claim 21, wherein the second analog signal is sent to a display (25). (See Appellant's specification, page 4, lines 25-27).

Claim 24 positively recites:

24. A digital video recorder according to claim 21, wherein a first switch (30) has a first input connected to the encoder (16), a second input connected to the medium interface (20) and an output connected to the decoder (22). (See Appellant's specification, page 5, lines 8-12 and page 5, lines 22-33).

Claim 25 positively recites:

25. A digital video recorder according to claim 21, comprising:  
means (50) for allowing the first digital stream to be recorded on the medium by the medium interface. (See Appellant's specification, page 4, lines 16-24 and page 6, lines 20-26).

Claim 26 positively recites:

26. A digital video recorder according to claim 25, wherein a second switch (32) has an input connected to the encoder (16) and an output connected to the medium interface (20). (See Appellant's specification, page 5, lines 1-7 and lines 13-19).

**Grounds of Rejections to be Reviewed on Appeal**

1. Whether the Appellant's claims 11- 23, 25 and 26 are patentable under 35 U.S.C. § 103(a) over Logan (US Patent 5,371,551) in view of Hrusecky (US Patent No. 6,317,164).
2. Whether the Appellant's claims 11, 17, 21 and 24 are patentable under 35 U.S.C. § 103(a) over Rigatti (US Patent 6,614,984) in view of Hrusecky (US Patent No. 6,317,164).
3. Pending claims 11- 23, 25 and 26 and 11, 17, 21 and 24 have been grouped together by the Examiner in their rejection. Appellant urges that each of the rejected claims stands on its own recitation, the claims being considered to be separately patentable for the reasons set forth in more detail *infra*.



**ARGUMENT**

**I. THE EXAMINER ERRED IN REJECTING CLAIMS 11- 23, 25 AND 26 UNDER 35 U.S.C. § 103(a) BECAUSE THE CITED REFERENCES FAIL TO TEACH, SUGGEST OR MAKE OBVIOUS AT LEAST A DIGITAL VIDEO RECORDER INCLUDING AT LEAST "A MULTIPLEXER COUPLED TO THE ENCODER AND TO THE DECODER AND TO THE DIGITAL SOURCE AND TO THE MEDIUM INTERFACE, WHEREIN THE MULTIPLEXER COMPRISES A FIRST SWITCH, WHICH SELECTIVELY COUPLES THE DECODER DIRECTLY TO THE ENCODER OR TO THE DIGITAL SOURCE *SUCH THAT A SIGNAL FROM THE ENCODER IS ABLE TO BE COMMUNICATED TO THE DECODER WITHOUT PRIOR RECORDING*".**

**A. 35 U.S.C. § 103(a) - Claim 11**

The Examiner rejected the Appellant's claim 11 under 35 U.S.C. § 103(a) as being unpatentable over Logan et al. (U.S. Patent 5,371,551, hereinafter "Logan") in view of Hrusecky (U.S. Patent 6,317,164). The rejection is respectfully traversed.

The Examiner alleges that regarding claim 11, Logan teaches a digital video system including almost all of the elements of the Appellant's claim 11 but that the Appellant's claim 11 differs from Logan in that claim 11 further requires wherein the multiplexer comprises a first switch, which selectively couples the decoder directly to the encoder or to the digital source such that the first digital stream from the encoder is able to be communicated to the decoder without prior recording. The Appellant respectfully agrees that Logan fails to teach at least the above identified limitation of at least the Appellant's claim 11.

The Examiner however cites Hrusecky for teaching a decoder directly coupled to the source in order to decode a plurality of digital video data streams using a single decoder. The Appellant respectfully disagrees.

Firstly, the Appellant respectfully submits that there is absolutely no motivation or suggestion in either reference for the combination of the references to attempt to teach the invention of the Appellant. More specifically, there is no motivation or suggestion in the invention of Logan for the combination of the references and likewise, the invention

of Hrusecky does not expressly or impliedly motivate or suggest such a combination as required for the combination of references under 35 U.S.C. § 103.

That is, for prior art reference to be combined to render obvious a subsequent invention under 35 U.S.C. § 103, there must be something in the prior art as a whole which suggests the desirability, and thus the obviousness, of making the combination. Uniroyal v. Rudkin-Wiley, 5 U.S.P.SQ.2d 1434, 1438 (Fed. Cir. 1988). The teachings of the references can be combined **only** if there is some suggestion or incentive in the prior art to do so. In re Fine, 5 U.S.P.SQ.2d 1596, 1599 (Fed. Cir. 1988). ***Hindsight is strictly forbidden. It is impermissible to use the claims as a framework to pick and choose among individual references to recreate the claimed invention*** Id. at 1600; W.L. Gore Associates, Inc., v. Garlock, Inc., 220 U.S.P.Q. 303, 312 (Fed. Cir. 1983).

Moreover, the mere fact that a prior art structure could be modified to produce the claimed invention would not have made the modification obvious unless the prior art suggested the desirability of the modification. In re Fritch, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992); In re Gordon, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984).

The Appellant further submits that even if there was a motivation or suggestion to combine (which the Appellant maintains that there is not), the teachings of Logan and Hrusecky, in any allowable combination, fail to teach, suggest or make obvious the Appellant's invention, at least with regard to the Appellant's independent claim 11. That is, the teachings of Hrusecky fail to bridge the substantial gap between at least the Appellant's independent claim 11 and the teachings of Logan.

That is, as conceded by the Examiner, Logan fails to teach, suggest or make obvious at least that the multiplexer comprises a first switch, which selectively couples the decoder directly to the encoder or to the digital source such that the first digital stream from the encoder is able to be communicated to the decoder without prior recording as taught in the Appellant's Specification and claimed by at least the Appellant's independent claim 11. The Appellant submits that Hrusecky also fails to teach, suggest or make obvious at least that the multiplexer comprises a first switch, which selectively couples the decoder directly to the encoder or to the digital source such that the first digital stream from the encoder is able to be communicated to the

decoder without prior recording as taught in the Appellant's Specification and claimed by at least the Appellant's claim 11. That is, Hrusecky discloses a multiplexer (25) comprising a first switch, which selectively couples the decoder (27) to one of a plurality of digital sources such that a third digital stream from the digital source is able to be communicated to the decoder without prior recording. However, the system disclosed by Hrusecky does not include an encoder. Therefore, the multiplexer (25) is not able to couple the decoder (27) to an encoder of a first analogue signal into a first digital stream. Furthermore, the multiplexers (3, 25) disclosed by both Logan and Hrusecky only comprise a single output. This means that by combining the teachings of Logan et al. and Hrusecky et al., a person skilled in the art does not arrive at the digital video system as claimed by at least the Appellant's claim 11, in which the multiplexer needs to have two outputs for coupling to the decoder and the medium interface. A person skilled in the art would either arrive at a digital video system comprising a multiplexer coupled to the encoder, to the digital source, and to the decoder, or at a digital video system comprising a multiplexer coupled to the encoder, to the digital source, and to the medium interface, or at a digital video system comprising a first multiplexer coupled to the encoder, to the decoder, and to the digital source, and a second multiplexer coupled to the encoder, to the decoder and to the medium interface.

More specifically, the Appellant's invention is directed at least in part to a digital video recorder including at least an analog source and a digital source where a received analog signal is encoded by an encoder. In the invention of the Appellant, a multiplexer is connected to both the encoder and to the digital source. The multiplexer is also connected to a medium interface for recording and reading on a medium and to a digital decoder linked to a display. The Appellant's invention enables a video recorder to independently record and monitor any of the sources and further a pre-recorded signal. More specifically, in support of the invention, at least as claimed by the Appellant's claim 11, the Appellant in the Specification, specifically recites:

"The digital streams from the digital source 14 and from the digital encoder 16 are coded according to the same format, which may be for instance the widely-used MPEG-II format. The digital encoder 16 on the one hand and the digital source 14 on the other hand are connected to two distinct inputs of a multiplexer 18.

The multiplexer 18 is also connected via a bi-directional link to a medium interface 20. The medium interface 20 is able to convert the coded digital stream into a bit stream to record it on a medium. For instance, in a digital VCR, the medium interface 20 comprises a drum carrying magnetic heads in order to record the bit stream on a magnetic tape according to the D-VHS format. In the reverse way, the medium interface 20 can read a bit stream from the pre-recorded medium and convert it into a digital stream coded according to a specific format, like MPEG-II, and output the digital stream on the bi-directional link.

An output of the multiplexer 18 is connected to a digital decoder 22. The digital decoder 22 is able to convert a coded digital stream (for instance a MPEG-II stream) into an analog signal to be displayed on a display 25." (See Appellant's Specification, page 4, lines 11-27).

The Appellant, in the Specification, further recites:

"The multiplexer 18 whose constitution will be detailed below allows to record and display independently any of the video signals from the analog source 12 and the digital source 14. Of course, it also allows to display a pre-recorded video signal.

As can be seen from figure 3 and as already explained, the multiplexer 18 has two separate inputs 22, 24 for receiving each a coded digital video stream. The input 22 is connected to the output of the digital encoder 16 and the input 24 is connected to the output of the digital source 14. The multiplexer 18 has an output 28 connected to the digital decoder 22. The multiplexer 18 is also connected at point 26 to the medium interface 20 via the bi-directional link.

The multiplexer 18 comprises a first switch 30 and a second switch 32. The first switch 30 allows to selectively link point 26 to input 22 or to input 24. The first switch 30 consequently allows to choose which video signal (among video signal from the analog source 12 and video signal from the digital source 14) should be sent to the medium interface 20 for recording.

The second switch 32 allows to selectively connect output 28 to input 22, to input 24 or to point 26. The second switch 32 thus allows to choose which video signal is to be decoded in decoder 22 and displayed on display 25 among video signal from the analog source 12 (input 22) and video signal from the digital source 14 (input 24), independently of the possible recording of one of these signals. The second switch 32 also allows to display a pre-recorded signal read from the medium interface 20 during play-back (point 26)." (See Appellant's Specification, page 4 line 34 through page 5, line 19).

It is clear from at least the portions of the Appellant's disclosure presented above that the Appellant's invention includes at least "a multiplexer coupled to the encoder and to the decoder and to the digital source and to the medium interface, wherein the multiplexer comprises a first switch, which selectively couples the decoder **directly** to

the encoder or to the digital source **such that a signal from the encoder is able to be communicated to the decoder without prior recording**" as taught in the Appellant's Specification and claimed by at least the Appellant's claim 11. (emphasis added).

The Appellant respectfully submits that there is absolutely no teaching, suggestion or disclosure in Logan or Hrusecky for a digital video recorder including at least "a multiplexer coupled to the encoder and to the decoder and to the digital source and to the medium interface, wherein the multiplexer comprises a first switch, which selectively couples the decoder **directly** to the encoder or to the digital source **such that a signal from the encoder is able to be communicated to the decoder without prior recording**" as taught in the Appellant's Specification and claimed by at least the Appellant's claim 11.

For at least the reasons described above, the Appellant respectfully submits that the teachings of Logan and Hrusecky, alone or in any allowable combination, fall far short of the Appellant's claimed invention, at least with respect to independent claim 11.

As such and at least because the teachings of Logan and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious the invention of the Appellant for at least the reasons recited above, the Appellant respectfully submits that independent claim 11 is not rendered obvious by the teachings of Logan and Hrusecky, alone or in any allowable combination, and, as such, fully satisfies the requirements of 35 U.S.C. § 103 and is patentable thereunder.

B. 35 U.S.C. § 103(a) - Claim 12

Claim 12 depends directly from independent claim 11 and recites further limitations thereof. At least because teachings of Logan and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious the invention of the Appellant with regard to at least the Appellant's independent claim 11, the Appellant respectfully submits that dependent claim 12 is also not rendered obvious and is allowable for at least the reasons stated above with respect to independent claim 11. The Appellant further submits that Logan and Hrusecky, alone or in any allowable combination, also fails to teach, suggest or make obvious the Appellant's claim 11 further limited by "wherein the multiplexer comprises a second switch which selectively couples the medium interface to the encoder or to the digital source " as in claim 12.

That is, and for at least the same reasons provided in Section A above, at least because Logan and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious at least a digital video recorder including at least an encoder, a decoder, a medium interface, a digital source and "a multiplexer coupled to the encoder and to the decoder and to the digital source and to the medium interface, wherein the multiplexer comprises a first switch, which selectively couples the decoder **directly** to the encoder or to the digital source **such that a signal from the encoder is able to be communicated to the decoder without prior recording**" as taught in the Appellant's Specification and claimed in at least the Appellant's claim 11, the Appellant respectfully submits that Logan and Hrusecky, alone or in any allowable combination, also fail to teach, suggest or make obvious the Appellant's invention as claimed in dependent claim 12, which depends directly from independent claim 11.

Therefore, the Appellant submits that claim 12, as it now stands, fully satisfies the requirements of 35 U.S.C. § 103 and is patentable thereunder.

C. 35 U.S.C. § 103 - Claim 13

Claim 13 depends directly from independent claim 11 and recites further limitations thereof. At least because teachings of Logan and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious the invention of the Appellant with regard to at least the Appellant's independent claim 11, the Appellant respectfully submits that dependent claim 13 is also not rendered obvious and is allowable for at least the reasons stated above with respect to independent claim 11. The Appellant further submits that Logan and Hrusecky, alone or in any allowable combination, also fails to teach, suggest or make obvious the Appellant's claim 11 further limited by "wherein the first switch selectively couples the decoder to the encoder, to the digital source or to the medium interface" as recited in claim 13.

That is, and for at least the same reasons provided in Section A above, at least because Logan and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious at least a digital video recorder including at least an encoder, a decoder, a medium interface, a digital source and "a multiplexer coupled to the encoder and to the decoder and to the digital source and to the medium interface, wherein the multiplexer comprises a first switch, which selectively couples the decoder

**directly** to the encoder or to the digital source **such that a signal from the encoder is able to be communicated to the decoder without prior recording**" as taught in the Appellant's Specification and claimed in at least the Appellant's claim 11, the Appellant respectfully submits that Logan and Hrusecky, alone or in any allowable combination, also fail to teach, suggest or make obvious the Appellant's invention as claimed in dependent claim 13, which depends directly from independent claim 11.

Therefore, the Appellant submits that claim 13, as it now stands, fully satisfies the requirements of 35 U.S.C. § 103 and is patentable thereunder.

D. 35 U.S.C. § 103(a) - Claim 14

Claim 14 depends directly from independent claim 11 and recites further limitations thereof. At least because teachings of Logan and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious the invention of the Appellant with regard to at least the Appellant's independent claim 11, the Appellant respectfully submits that dependent claim 14 is also not rendered obvious and is allowable for at least the reasons stated above with respect to independent claim 11. The Appellant further submits that Logan and Hrusecky, alone or in any allowable combination, also fails to teach, suggest or make obvious the Appellant's claim 11 further limited by "wherein a transcoder receiving a fourth digital stream is coupled to the multiplexer" as recited in claim 14.

That is, and for at least the same reasons provided in Section A above, at least because Logan and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious at least a digital video recorder including at least an encoder, a decoder, a medium interface, a digital source and "a multiplexer coupled to the encoder and to the decoder and to the digital source and to the medium interface, wherein the multiplexer comprises a first switch, which selectively couples the decoder **directly** to the encoder or to the digital source **such that a signal from the encoder is able to be communicated to the decoder without prior recording**" as taught in the Appellant's Specification and claimed in at least the Appellant's claim 11, the Appellant respectfully submits that Logan and Hrusecky, alone or in any allowable combination, also fail to teach, suggest or make obvious the Appellant's invention as claimed in dependent claim 14, which depends directly from independent claim 11.

Therefore, the Appellant submits that claim 14, as it now stands, fully satisfies the requirements of 35 U.S.C. § 103 and is patentable thereunder.

E. 35 U.S.C. § 103(a) - Claim 15

Claim 15 depends directly from claim 14 which depends directly from independent claim 11 and recites further limitations thereof. At least because teachings of Logan and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious the invention of the Appellant with regard to at least the Appellant's independent claim 11 and dependent claim 14, the Appellant respectfully submits that dependent claim 15 is also not rendered obvious and is allowable for at least the reasons stated above with respect to independent claim 11 and dependent claim 14. The Appellant further submits that Logan and Hrusecky, alone or in any allowable combination, also fail to teach, suggest or make obvious the Appellant's claims 11 and 14 further limited by "wherein the second switch selectively couples the medium interface to the encoder, to the digital source or to the transcoder, and wherein the first switch selectively couples the decoder to the encoder, to the digital source or to the transcoder" as recited in claim 15.

That is, and for at least the same reasons provided in Sections A and D above, at least because Logan and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious at least a digital video recorder including at least an encoder, a decoder, a medium interface, a digital source and "a multiplexer coupled to the encoder and to the decoder and to the digital source and to the medium interface, wherein the multiplexer comprises a first switch, which selectively couples the decoder **directly** to the encoder or to the digital source **such that a signal from the encoder is able to be communicated to the decoder without prior recording**" as taught in the Appellant's Specification and claimed in at least the Appellant's claim 11, and as further limited by the limitations of claim 14, the Appellant respectfully submits that Logan and Hrusecky, alone or in any allowable combination, also fail to teach, suggest or make obvious the Appellant's invention as claimed in dependent claim 15, which depends directly from claim 14 and indirectly from independent claim 11.

Therefore, the Appellant submits that claim 15, as it now stands, fully satisfies the requirements of 35 U.S.C. § 103 and is patentable thereunder.



F. 35 U.S.C. § 103(a) - Claim 16

Claim 16 depends directly from claim 14 which depends directly from independent claim 11 and recites further limitations thereof. At least because teachings of Logan and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious the invention of the Appellant with regard to at least the Appellant's independent claim 11 and dependent claim 14, the Appellant respectfully submits that dependent claim 16 is also not rendered obvious and is allowable for at least the reasons stated above with respect to independent claim 11 and dependent claim 14. The Appellant further submits that Logan and Hrusecky, alone or in any allowable combination, also fail to teach, suggest or make obvious the Appellant's claims 11 and 14 further limited by "wherein the first switch selectively couples the decoder to the encoder, to the digital source, to the transcoder or to the medium interface" as recited in claim 16.

That is, and for at least the same reasons provided in Sections A and D above, at least because Logan and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious at least a digital video recorder including at least an encoder, a decoder, a medium interface, a digital source and "a multiplexer coupled to the encoder and to the decoder and to the digital source and to the medium interface, wherein the multiplexer comprises a first switch, which selectively couples the decoder **directly** to the encoder or to the digital source **such that a signal from the encoder is able to be communicated to the decoder without prior recording**" as taught in the Appellant's Specification and claimed in at least the Appellant's claim 11, and as further limited by the limitations of claim 14, the Appellant respectfully submits that Logan and Hrusecky, alone or in any allowable combination, also fail to teach, suggest or make obvious the Appellant's invention as claimed in dependent claim 16, which depends directly from claim 14 and indirectly from independent claim 11.

Therefore, the Appellant submits that claim 16, as it now stands, fully satisfies the requirements of 35 U.S.C. § 103 and is patentable thereunder.

G. 35 U.S.C. § 103(a) - Claim 17

Claim 17 is an independent claim that recites similar relevant features as recited in the Appellant's independent claim 11. More specifically, claim 17 claims a digital video recorder including a digital encoder, a digital decoder, a medium interface for reading and recording on a medium and a multiplexer, coupled to the digital encoder, to the digital decoder and to the medium interface, where the multiplexer includes a first switch which couples the digital decoder directly to the digital encoder such that a signal from the encoder is able to be communicated to the decoder without prior recording.

As described in section A above, the teachings of Logan and Hrusecky, alone or in any allowable combination, absolutely fail to teach, suggest or render obvious at least a digital video recorder including at least an encoder, a decoder, a medium interface, a digital source and "a multiplexer coupled to the encoder and to the decoder and to the digital source and to the medium interface, wherein the multiplexer comprises a first switch, which selectively couples the decoder **directly** to the encoder or to the digital source **such that a signal from the encoder is able to be communicated to the decoder without prior recording**" as taught in the Appellant's Specification and claimed in at least the Appellant's claim 11 and as similarly claimed in the Appellant's claim 17 claiming a digital video recorder including a digital encoder, a digital decoder, a medium interface for reading and recording on a medium and "a multiplexer, coupled to the digital encoder, to the digital decoder and to the medium interface, **the multiplexer having a first switch which couples the digital decoder directly to the digital encoder such that a signal from the encoder is able to be communicated to the decoder without prior recording**". That is, the Appellant respectfully submits that independent claim 17 is also not rendered obvious by Logan and Hrusecky, alone or in any allowable combination, and is allowable for at least the reasons stated above with respect to independent claim 11.

Therefore, the Appellant submits that claim 17, as it now stands, fully satisfies the requirements of 35 U.S.C. § 103 and is patentable thereunder.

H. 35 U.S.C. § 102(b) - Claim 18

Claim 18 depends directly from independent claim 17 and recites further limitations thereof. At least because teachings of Logan and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious the invention of the Appellant with regard to at least the Appellant's independent claim 17, the Appellant respectfully submits that dependent claim 18 is also not rendered obvious and is allowable for at least the reasons stated above with respect to independent claim 17. The Appellant further submits that Logan and Hrusecky, alone or in any allowable combination, also fail to teach, suggest or render obvious the Appellant's claim 17 further limited by "wherein the multiplexer comprises a second switch, which couples the medium interface to the digital encoder" as recited in claim 18.

That is, and for at least the same reasons provided in Sections A and G above, at least because Logan and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious at least a digital video recorder including a digital encoder, a digital decoder, a medium interface for reading and recording on a medium and "a multiplexer, coupled to the digital encoder, to the digital decoder and to the medium interface, **the multiplexer having a first switch which couples the digital decoder directly to the digital encoder such that a signal from the encoder is able to be communicated to the decoder without prior recording**" as taught in the Appellant's Specification and claimed in at least the Appellant's claim 17, the Appellant respectfully submits that Logan and Hrusecky, alone or in any allowable combination, also fail to teach, suggest or render obvious the Appellant's invention as claimed in dependent claim 18, which depends directly from independent claim 17.

Therefore, the Appellant submits that claim 18, as it now stands, fully satisfies the requirements of 35 U.S.C. § 103 and is patentable thereunder.

I. 35 U.S.C. § 103(a) - Claim 19

Claim 19 depends directly from independent claim 17 and recites further limitations thereof. At least because teachings of Logan and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious the invention of the Appellant with regard to at least the Appellant's independent claim 17, the Appellant

respectfully submits that dependent claim 19 is also not rendered obvious and is allowable for at least the reasons stated above with respect to independent claim 17. The Appellant further submits that Logan and Hrusecky, alone or in any allowable combination, also fail to teach, suggest or render obvious the Appellant's claim 17 further limited by "wherein the first switch selectively couples the decoder to the encoder or to the medium interface" as recited in claim 19.

That is, and for at least the same reasons provided in Sections A and G above, at least because Logan and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious at least a digital video recorder including a digital encoder, a digital decoder, a medium interface for reading and recording on a medium and "a multiplexer, coupled to the digital encoder, to the digital decoder and to the medium interface, **the multiplexer having a first switch which couples the digital decoder directly to the digital encoder such that a signal from the encoder is able to be communicated to the decoder without prior recording**" as taught in the Appellant's Specification and claimed in at least the Appellant's claim 17, the Appellant respectfully submits that Logan and Hrusecky, alone or in any allowable combination, also fail to teach, suggest or render obvious the Appellant's invention as claimed in dependent claim 19, which depends directly from independent claim 17.

Therefore, the Appellant submits that claim 19, as it now stands, fully satisfies the requirements of 35 U.S.C. § 103 and is patentable thereunder.

J. 35 U.S.C. § 103(a) - Claim 20.

Claim 20 depends directly from independent claim 17 and recites further limitations thereof. At least because teachings of Logan and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious the invention of the Appellant with regard to at least the Appellant's independent claim 17, the Appellant respectfully submits that dependent claim 20 is also not rendered obvious and is allowable for at least the reasons stated above with respect to independent claim 17. The Appellant further submits that Logan and Hrusecky, alone or in any allowable combination, also fail to teach, suggest or render obvious the Appellant's claim 17

further limited by "wherein the digital encoder is coupled to a tuner for receiving analog signals" as recited in claim 20.

That is, and for at least the same reasons provided in Sections A and G above, at least because Logan and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious at least a digital video recorder including a digital encoder, a digital decoder, a medium interface for reading and recording on a medium and "a multiplexer, coupled to the digital encoder, to the digital decoder and to the medium interface, **the multiplexer having a first switch which couples the digital decoder directly to the digital encoder such that a signal from the encoder is able to be communicated to the decoder without prior recording**" as taught in the Appellant's Specification and claimed in at least the Appellant's claim 17, the Appellant respectfully submits that Logan and Hrusecky, alone or in any allowable combination, also fail to teach, suggest or render obvious the Appellant's invention as claimed in dependent claim 20, which depends directly from independent claim 17.

Therefore, the Appellant submits that claim 20, as it now stands, fully satisfies the requirements of 35 U.S.C. § 103 and is patentable thereunder.

K. 35 U.S.C. § 103(a) - Claim 21

Claim 21 is an independent claim that recites similar relevant features as recited in the Appellant's independent claims 11 and 17. More specifically, claim 21 claims a digital video recorder including an encoder of a first analog signal into a first digital stream, a medium interface for reading a second digital stream from a medium, a decoder for decoding the first digital stream or the second digital stream into a second analog stream, and a means for communicating the first digital stream directly from the encoder to the decoder without prior recording.

As described in section A above, the teachings of Logan and Hrusecky, alone or in any allowable combination, absolutely fail to teach, suggest or render obvious at least a digital video recorder including at least an encoder, a decoder, a medium interface, a digital source and "a multiplexer coupled to the encoder and to the decoder and to the digital source and to the medium interface, wherein the multiplexer comprises a first switch, which selectively couples the decoder **directly** to the encoder or to the digital

source **such that a signal from the encoder is able to be communicated to the decoder without prior recording**" as taught in the Appellant's Specification and claimed in at least the Appellant's claim 11 and as similarly claimed in the Appellant's claim 17 claiming a digital video recorder including a digital encoder, a digital decoder, a medium interface for reading and recording on a medium and "a multiplexer, coupled to the digital encoder, to the digital decoder and to the medium interface, **the multiplexer having a first switch which couples the digital decoder directly to the digital encoder such that a signal from the encoder is able to be communicated to the decoder without prior recording**" and as similarly claimed in the Appellant's claim 21 claiming a digital video recorder including an encoder of a first analog signal into a first digital stream, a medium interface for reading a second digital stream from a medium, a decoder for decoding the first digital stream or the second digital stream into a second analog stream, and **"a means for communicating the first digital stream directly from the encoder to the decoder without prior recording"**. That is, the Appellant respectfully submits that independent claim 21 is also not rendered obvious by Logan and Hrusecky, alone or in any allowable combination, and is allowable for at least the reasons stated above with respect to independent claims 11 and 17.

Therefore, the Appellant submits that claim 21, as it now stands, fully satisfies the requirements of 35 U.S.C. § 103 and is patentable thereunder.

L. 35 U.S.C. § 103(a) - Claim 22

Claim 22 depends directly from independent claim 21 and recites further limitations thereof. At least because teachings of Logan and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious the invention of the Appellant with regard to at least the Appellant's independent claim 21, the Appellant respectfully submits that dependent claim 22 is also not rendered obvious and is allowable for at least the reasons stated above with respect to independent claim 21. The Appellant further submits that Logan and Hrusecky, alone or in any allowable combination, also fail to teach, suggest or render obvious the Appellant's claim 21 further limited by "wherein a tuner generates the first analog signal" as recited in claim 22.

That is, and for at least the same reasons provided in Sections A, G and K above, at least because Logan and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious at least a digital video recorder including an encoder of a first analog signal into a first digital stream, a medium interface for reading a second digital stream from a medium, a decoder for decoding the first digital stream or the second digital stream into a second analog stream, and **"a means for communicating the first digital stream directly from the encoder to the decoder without prior recording"** as taught in the Appellant's Specification and claimed in at least the Appellant's claim 21, the Appellant respectfully submits that Logan and Hrusecky, alone or in any allowable combination, also fail to teach, suggest or render obvious the Appellant's invention as claimed in dependent claim 22, which depends directly from independent claim 21.

Therefore, the Appellant submits that claim 22, as it now stands, fully satisfies the requirements of 35 U.S.C. § 103 and is patentable thereunder.

M. 35 U.S.C. § 103(a) - Claim 23

Claim 23 depends directly from independent claim 21 and recites further limitations thereof. At least because teachings of Logan and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious the invention of the Appellant with regard to at least the Appellant's independent claim 21, the Appellant respectfully submits that dependent claim 23 is also not rendered obvious and is allowable for at least the reasons stated above with respect to independent claim 21. The Appellant further submits that Logan and Hrusecky, alone or in any allowable combination, also fail to teach, suggest or render obvious the Appellant's claim 21 further limited by "wherein the second analog signal is sent to a display" as recited in claim 23.

That is, and for at least the same reasons provided in Sections A, G and K above, at least because Logan and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious at least a digital video recorder including an encoder of a first analog signal into a first digital stream, a medium interface for reading a second digital stream from a medium, a decoder for decoding the first digital stream or

the second digital stream into a second analog stream, and **"a means for communicating the first digital stream directly from the encoder to the decoder without prior recording"** as taught in the Appellant's Specification and claimed in at least the Appellant's claim 21, the Appellant respectfully submits that Logan and Hrusecky, alone or in any allowable combination, also fail to teach, suggest or render obvious the Appellant's invention as claimed in dependent claim 23, which depends directly from independent claim 21.

Therefore, the Appellant submits that claim 23, as it now stands, fully satisfies the requirements of 35 U.S.C. § 103 and is patentable thereunder.

N. 35 U.S.C. § 103(a) - Claim 24

Claim 24 depends directly from independent claim 21 and recites further limitations thereof. At least because teachings of Logan and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious the invention of the Appellant with regard to at least the Appellant's independent claim 21, the Appellant respectfully submits that dependent claim 24 is also not rendered obvious and is allowable for at least the reasons stated above with respect to independent claim 21. The Appellant further submits that Logan and Hrusecky, alone or in any allowable combination, also fail to teach, suggest or render obvious the Appellant's claim 21 further limited by "wherein a first switch has a first input connected to the encoder, a second input connected to the medium interface and an output connected to the decoder" as recited in claim 24.

That is, and for at least the same reasons provided in Sections A, G and K above, at least because Logan and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious at least a digital video recorder including an encoder of a first analog signal into a first digital stream, a medium interface for reading a second digital stream from a medium, a decoder for decoding the first digital stream or the second digital stream into a second analog stream, and **"a means for communicating the first digital stream directly from the encoder to the decoder without prior recording"** as taught in the Appellant's Specification and claimed in at least the Appellant's claim 21, the Appellant respectfully submits that Logan and



Hrusecky, alone or in any allowable combination, also fail to teach, suggest or render obvious the Appellant's invention as claimed in dependent claim 24, which depends directly from independent claim 21.

Therefore, the Appellant submits that claim 24, as it now stands, fully satisfies the requirements of 35 U.S.C. § 103 and is patentable thereunder.

O. 35 U.S.C. § 103(a) - Claim 25

Claim 25 depends directly from independent claim 21 and recites further limitations thereof. At least because teachings of Logan and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious the invention of the Appellant with regard to at least the Appellant's independent claim 21, the Appellant respectfully submits that dependent claim 25 is also not rendered obvious and is allowable for at least the reasons stated above with respect to independent claim 21. The Appellant further submits that Logan and Hrusecky, alone or in any allowable combination, also fail to teach, suggest or render obvious the Appellant's claim 21 further including "means for allowing the first digital stream to be recorded on the medium by the medium interface" as recited in claim 25.

That is, and for at least the same reasons provided in Sections A, G and K above, at least because Logan and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious at least a digital video recorder including an encoder of a first analog signal into a first digital stream, a medium interface for reading a second digital stream from a medium, a decoder for decoding the first digital stream or the second digital stream into a second analog stream, and **"a means for communicating the first digital stream directly from the encoder to the decoder without prior recording"** as taught in the Appellant's Specification and claimed in at least the Appellant's claim 21, the Appellant respectfully submits that Logan and Hrusecky, alone or in any allowable combination, also fail to teach, suggest or render obvious the Appellant's invention as claimed in dependent claim 25, which depends directly from independent claim 21.

Therefore, the Appellant submits that claim 25, as it now stands, fully satisfies the requirements of 35 U.S.C. § 103 and is patentable thereunder.

P. 35 U.S.C. § 103(a) - Claim 26.

Claim 26 depends directly from claim 25 which depends directly from independent claim 21 and recites further limitations thereof. At least because teachings of Logan and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious the invention of the Appellant with regard to at least the Appellant's independent claim 21 and dependent claim 25, the Appellant respectfully submits that dependent claim 26 is also not rendered obvious and is allowable for at least the reasons stated above with respect to independent claim 21 and dependent claim 25. The Appellant further submits that Logan and Hrusecky, alone or in any allowable combination, also fail to teach, suggest or make obvious the Appellant's claims 21 and 25 further limited by "wherein a second switch has an input connected to the encoder and an output connected to the medium interface" as recited in claim 26.

That is, and for at least the same reasons provided in Sections A, G, K and O above, at least because Logan and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious at least a digital video recorder including an encoder of a first analog signal into a first digital stream, a medium interface for reading a second digital stream from a medium, a decoder for decoding the first digital stream or the second digital stream into a second analog stream, and **"a means for communicating the first digital stream directly from the encoder to the decoder without prior recording"** as taught in the Appellant's Specification and claimed in at least the Appellant's claims 21 and 25, the Appellant respectfully submits that Logan and Hrusecky, alone or in any allowable combination, also fail to teach, suggest or render obvious the Appellant's invention as claimed in dependent claim 26, which depends directly from claim 25 and indirectly from independent claim 21.

Therefore, the Appellant submits that claim 26, as it now stands, fully satisfies the requirements of 35 U.S.C. § 103 and is patentable thereunder.

**II. THE EXAMINER ERRED IN REJECTING CLAIMS 11, 17, 21 and 24 UNDER 35 U.S.C. § 103(a) BECAUSE THE CITED REFERENCES FAIL TO TEACH, SUGGEST OR MAKE OBVIOUS AT LEAST A DIGITAL VIDEO RECORDER INCLUDING AT LEAST "A MULTIPLEXER COUPLED TO THE ENCODER AND TO THE DECODER AND TO THE DIGITAL SOURCE AND TO THE MEDIUM INTERFACE, WHEREIN THE MULTIPLEXER COMPRISES A FIRST SWITCH, WHICH SELECTIVELY COUPLES THE DECODER DIRECTLY TO THE ENCODER OR TO THE DIGITAL SOURCE *SUCH THAT A SIGNAL FROM THE ENCODER IS ABLE TO BE COMMUNICATED TO THE DECODER WITHOUT PRIOR RECORDING*".**

A. 35 U.S.C. § 103(a) - Claim 11

The Examiner rejected the Appellant's claim 11 under 35 U.S.C. § 103(a) as being unpatentable over Rigatti (U.S. Patent 6,614,984) in view of Hrusecky (U.S. Patent 6,317,164). The rejection is respectfully traversed.

The Examiner alleges that regarding claim 11, Rigatti teaches a digital video system including almost all of the elements of the Appellant's claims but that the Appellant's claim 11 differs from Rigatti in that the claims further require wherein the multiplexer comprises a first switch, which selectively couples the decoder directly to the encoder or to the digital source such that the first digital stream from the encoder is able to be communicated to the decoder without prior recording. The Appellant respectfully agrees that Rigatti fails to teach at least the above identified limitation of at least the Appellant's claim 11.

The Examiner however cites Hrusecky for teaching a decoder directly coupled to the source in order to decode a plurality of digital video data streams using a single decoder. The Appellant respectfully disagrees.

The Appellant respectfully submits that there is absolutely no motivation or suggestion in either reference for the combination of the references to attempt to teach the invention of the Appellant. More specifically, there is no motivation or suggestion in the invention of Rigatti for the combination of the references and likewise, the invention

of Hrusecky does not expressly or impliedly motivate or suggest such a combination as required for the combination of references under 35 U.S.C. § 103.

The Appellant further submits that even if there was a motivation or suggestion to combine (which the Appellant maintains that there is not), the teachings of Rigatti and Hrusecky, in any allowable combination, fail to teach, suggest or make obvious the Appellant's invention, at least with regard to the Appellant's independent claim 11. That is, the teachings of Hrusecky fail to bridge the substantial gap between at least the Appellant's independent claim 11 and the teachings of Rigatti.

That is, as conceded by the Examiner, Rigatti fails to teach, suggest or make obvious at least that the multiplexer comprises a first switch, which selectively couples the decoder directly to the encoder or to the digital source such that the first digital stream from the encoder is able to be communicated to the decoder without prior recording as taught in the Appellant's Specification and claimed by at least the Appellant's independent claim 11. Hrusecky also fails to teach, suggest or make obvious at least that the multiplexer comprises a first switch, which selectively couples the decoder directly to the encoder or to the digital source such that the first digital stream from the encoder is able to be communicated to the decoder without prior recording as taught in the Appellant's Specification and claimed by at least the Appellant's claim 11. That is, Hrusecky discloses a multiplexer (25) comprising a first switch, which selectively couples the decoder (27) to one of a plurality of digital sources such that a third digital stream from the digital source is able to be communicated to the decoder without prior recording. However, the system disclosed by Hrusecky does not include an encoder. Therefore, the multiplexer (25) is not able to couple the decoder (27) to an encoder of a first analogue signal into a first digital stream. Furthermore, the multiplexers (3, 25) disclosed by both Logan and Hrusecky only comprise a single output. This means that by combining the teachings of Logan et al. and Hrusecky et al., a person skilled in the art does not arrive at the digital video system as claimed by at least the Appellant's claim 11, in which the multiplexer needs to have two outputs for coupling to the decoder and the medium interface. A person skilled in the art would again either arrive at a digital video system comprising a multiplexer coupled to the encoder, to the digital source, and to the decoder, or at a digital video system

comprising a multiplexer coupled to the encoder, to the digital source, and to the medium interface, or at a digital video system comprising a first multiplexer coupled to the encoder, to the decoder, and to the digital source, and a second multiplexer coupled to the encoder, to the decoder and to the medium interface.

For at least the reasons described above, the Appellant respectfully submits that the teachings of Rigatti and Hrusecky, alone or in any allowable combination, fall far short of the Appellant's claimed invention, at least with respect to independent claim 11.

As such and at least because the teachings of Rigatti and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious the invention of the Appellant for at least the reasons recited above, the Appellant respectfully submits that independent claim 11 is not rendered obvious by the teachings of Rigatti and Hrusecky, alone or in any allowable combination, and, as such, fully satisfies the requirements of 35 U.S.C. § 103 and is patentable thereunder.

B. 35 U.S.C. § 103(a) - Claim 17

Claim 17 is an independent claim that recites similar relevant features as recited in the Appellant's independent claim 11. More specifically, claim 17 claims a digital video recorder including a digital encoder, a digital decoder, a medium interface for reading and recording on a medium and a multiplexer, coupled to the digital encoder, to the digital decoder and to the medium interface, where the multiplexer includes a first switch which couples the digital decoder directly to the digital encoder such that a signal from the encoder is able to be communicated to the decoder without prior recording.

As described in section A above, the teachings of Rigatti and Hrusecky, alone or in any allowable combination, absolutely fail to teach, suggest or render obvious at least a digital video recorder including at least an encoder, a decoder, a medium interface, a digital source and "a multiplexer coupled to the encoder and to the decoder and to the digital source and to the medium interface, wherein the multiplexer comprises a first switch, which selectively couples the decoder **directly** to the encoder or to the digital source **such that a signal from the encoder is able to be communicated to the decoder without prior recording**" as taught in the Appellant's Specification and claimed in at least the Appellant's claim 11 and as similarly claimed in the Appellant's

claim 17 claiming a digital video recorder including a digital encoder, a digital decoder, a medium interface for reading and recording on a medium and "a multiplexer, coupled to the digital encoder, to the digital decoder and to the medium interface, **the multiplexer having a first switch which couples the digital decoder directly to the digital encoder such that a signal from the encoder is able to be communicated to the decoder without prior recording**". That is, the Appellant respectfully submits that independent claim 17 is also not rendered obvious by Rigatti and Hrusecky, alone or in any allowable combination, and is allowable for at least the reasons stated above with respect to independent claim 11.

Therefore, the Appellant submits that claim 17, as it now stands, fully satisfies the requirements of 35 U.S.C. § 103 and is patentable thereunder.

C. 35 U.S.C. § 103(a) - Claim 21

Claim 21 is an independent claim that recites similar relevant features as recited in the Appellant's independent claims 11 and 17. More specifically, claim 21 claims a digital video recorder including an encoder of a first analog signal into a first digital stream, a medium interface for reading a second digital stream from a medium, a decoder for decoding the first digital stream or the second digital stream into a second analog stream, and a means for communicating the first digital stream directly from the encoder to the decoder without prior recording.

As described in section A above, the teachings of Rigatti and Hrusecky, alone or in any allowable combination, absolutely fail to teach, suggest or render obvious at least a digital video recorder including at least an encoder, a decoder, a medium interface, a digital source and "a multiplexer coupled to the encoder and to the decoder and to the digital source and to the medium interface, wherein the multiplexer comprises a first switch, which selectively couples the decoder **directly** to the encoder or to the digital source **such that a signal from the encoder is able to be communicated to the decoder without prior recording**" as taught in the Appellant's Specification and claimed in at least the Appellant's claim 11 and as similarly claimed in the Appellant's claim 17 claiming a digital video recorder including a digital encoder, a digital decoder, a medium interface for reading and recording on a medium and "a multiplexer, coupled to

the digital encoder, to the digital decoder and to the medium interface, **the multiplexer having a first switch which couples the digital decoder directly to the digital encoder such that a signal from the encoder is able to be communicated to the decoder without prior recording**" and as similarly claimed in the Appellant's claim 21 claiming a digital video recorder including an encoder of a first analog signal into a first digital stream, a medium interface for reading a second digital stream from a medium, a decoder for decoding the first digital stream or the second digital stream into a second analog stream, and **"a means for communicating the first digital stream directly from the encoder to the decoder without prior recording"**. That is, the Appellant respectfully submits that independent claim 21 is also not rendered obvious by Rigatti and Hrusecky, alone or in any allowable combination, and is allowable for at least the reasons stated above with respect to independent claims 11 and 17.

Therefore, the Appellant submits that claim 21, as it now stands, fully satisfies the requirements of 35 U.S.C. § 103 and is patentable thereunder.

D. 35 U.S.C. § 103(a) - Claim 24

Claim 24 depends directly from independent claim 21 and recites further limitations thereof. At least because teachings of Rigatti and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious the invention of the Appellant with regard to at least the Appellant's independent claim 21, the Appellant respectfully submits that dependent claim 24 is also not rendered obvious and is allowable for at least the reasons stated above with respect to independent claim 21. The Appellant further submits that Rigatti and Hrusecky, alone or in any allowable combination, also fail to teach, suggest or render obvious the Appellant's claim 21 further limited by "wherein a first switch has a first input connected to the encoder, a second input connected to the medium interface and an output connected to the decoder" as recited in claim 24.

That is, and for at least the same reasons provided in Sections A, B and C above, at least because Rigatti and Hrusecky, alone or in any allowable combination, fail to teach, suggest or make obvious at least a digital video recorder including an encoder of a first analog signal into a first digital stream, a medium interface for reading

a second digital stream from a medium, a decoder for decoding the first digital stream or the second digital stream into a second analog stream, and **"a means for communicating the first digital stream directly from the encoder to the decoder without prior recording"** as taught in the Appellant's Specification and claimed in at least the Appellant's claim 21, the Appellant respectfully submits that Rigatti and Hrusecky, alone or in any allowable combination, also fail to teach, suggest or render obvious the Appellant's invention as claimed in dependent claim 24, which depends directly from independent claim 21.

Therefore, the Appellant submits that claim 24, as it now stands, fully satisfies the requirements of 35 U.S.C. § 103 and is patentable thereunder.




### Conclusion

Thus, the Appellant submits that none of the claims presently in the application are rendered obvious under the provisions of 35 U.S.C. § 103. Consequently, the Appellant believes all these claims are presently in condition for allowance.

For the reasons advanced above, the Appellant respectfully urges that the rejections of claims 11-26 as being rendered obvious under 35 U.S.C. §103 are improper. Reversal of the rejections in this Appeal is respectfully requested.

Respectfully submitted,

27 July 06  
Date

  
\_\_\_\_\_  
Jorge Tony Villabon, Attorney for the Appellant  
Registration No. 52,322  
(609) 734-6445

Patent Operations  
Thomson Licensing Inc.  
P.O. Box 5312  
Princeton, New Jersey 08543-5312

## CLAIMS APPENDIX

11. (Previously Presented) A digital video recorder comprising:
- an encoder of a first analog signal into a first digital stream;
  - a decoder of a second digital stream into a second analog signal;
  - a medium interface for reading and recording on a medium;
  - at least one digital source outputting a third digital stream; and,
  - a multiplexer coupled to the encoder and to the decoder and to the digital source and to the medium interface,
- wherein the multiplexer comprises a first switch, which selectively couples the decoder directly to the encoder or to the digital source such that the first digital stream from the encoder is able to be communicated to the decoder without prior recording.
12. (Original) A digital video recorder according to claim 11, wherein the multiplexer comprises a second switch which selectively couples the medium interface to the encoder or to the digital source.
13. (Previously Presented) A digital video recorder according to claim 11, wherein the first switch selectively couples the decoder to the encoder, to the digital source or to the medium interface.
14. (Original) A digital video recorder according to claim 11, wherein a transcoder receiving a fourth digital stream is coupled to the multiplexer.
15. (Original) A digital video recorder according to claim 14, wherein the second switch selectively couples the medium interface to the encoder, to the digital source or to the transcoder, and wherein the first switch selectively couples the decoder to the encoder, to the digital source or to the transcoder.

16. (Original) A digital video recorder according to claim 14, wherein the first switch selectively couples the decoder to the encoder, to the digital source, to the transcoder or to the medium interface.

17. (Previously Presented) A digital video recorder comprising:

- a digital encoder ;

- a digital decoder ;

- a medium interface for reading and recording on a medium;

- a multiplexer, coupled to the digital encoder, to the digital decoder and to the medium interface, the multiplexer having a first switch which couples the digital decoder directly to the digital encoder such that a signal from the encoder is able to be communicated to the decoder without prior recording.

18. (Original) A digital video recorder according to claim 17, wherein the multiplexer comprises a second switch, which couples the medium interface to the digital encoder.

19. (Original) A digital video recorder according to claim 17, wherein the first switch selectively couples the decoder to the encoder or to the medium interface.

20. (Previously Presented) A digital video recorder according to claim 17, wherein the digital encoder is coupled to a tuner for receiving analog signals.

21. (Previously Presented) A digital video recorder comprising:

- an encoder of a first analog signal into a first digital stream;

- a medium interface for reading a second digital stream from a medium;

- a decoder for decoding the first digital stream or the second digital stream into a second analog stream;

- means for communicating the first digital stream directly from the encoder to the decoder without prior recording.

22. (Previously Presented) Digital video recorder according to claim 21, wherein a tuner generates the first analog signal.

23. (Previously Presented) A digital video recorder according to claim 21, wherein the second analog signal is sent to a display.

24. (Original) A digital video recorder according to claim 21, wherein a first switch has a first input connected to the encoder, a second input connected to the medium interface and an output connected to the decoder.

25. (Original) A digital video recorder according to claim 21, comprising:  
means for allowing the first digital stream to be recorded on the medium by the medium interface.

26. (Original) A digital video recorder according to claim 25, wherein a second switch has an input connected to the encoder and an output connected to the medium interface.

### **EVIDENCE APPENDIX**

Appellant asserts that there is no evidence to be submitted in accordance with this section.

**RELATED PROCEEDINGS APPENDIX**

Appellant asserts that there are no copies of decisions to be submitted in accordance with this section.